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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/804,619

03/19/2004

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EXAMINER

ALVESTEFFER, STEPHEN D

ART UNIT

PAPER NUMBER

2173

NOTIFICATION DATE

DELIVERY MODE

10/18/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/804,619

Applicant(s)

FENG ET AL.

Examiner

Stephen Alvesteffer

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is responsive to the amendment filed July 27, 2007. Claims 1, 5, 10, 21, 24, 25, 29, and 30 are amended. Claims 1, 6, 15, 21, and 25 are independent claims. Claims 1-30 remain pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Canon Kabushiki Kaisha (hereinafter Canon), European Patent Application number EP 1 205 843 A.

Regarding claim 1, Canon teaches a system for use in client/server computing comprising a client that interfaces with an applications program (see paragraph [0010]; *"In an embodiment, a user interface application defining a user interface device is implemented as a series of filters"*, the user interface device is equivalent to the client, the user interface application is equivalent to the applications program); a server in communication with the client that responds to a request from the applications program communicated to the server by the client for services available through said server (see paragraph [0009]; *"The user interface device may be used with stand-alone processor-*

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controlled machines such as printers, copiers, scanners etc. or may be used where a number of processor-controlled machines are coupled to a network such as a local or wide area network. In this case, the user interface device may communicate with a processor controlled machine either directly or via the network"), wherein the server is a print server operable to service print requests from one or more client computers (see paragraph [0090]; *"the communications control apparatus 25 of the processor-controlled machine with which the user interface device 12 is communicating forms a server for the user interface device 12"*, the communications control apparatus of the processor-controlled machine functions as the server); and a user interface manager that communicates with the server by means of an asynchronous communications channel between the server and the client and further wherein the user interface component responds to a user interface message sent from the server to display information to a user (the series of filters is equivalent to the user interface manager, the remote communications interface is equivalent to the asynchronous communications channel, the display device is equivalent to the user interface component, the XML device description is equivalent to the user interface message).

The examiner understands asynchronous communication to mean network communication where the client or the server can send information to each other at any time. Using this understanding, Canon teaches that the remote communications interface behaves asynchronously (see paragraph [0085]).

The invention as taught by Canon passes device descriptions in the form of XML documents between the client and the server (see paragraphs [0058], [0059], and

[0060]; *"The device descriptions are in the form of XML documents which define the functions available from the corresponding processor-controlled machine or device"*).

The device descriptions are language neutral, that is, there is only one format of device descriptions that is interpreted by a plurality of different clients in a plurality of different ways (see paragraph [0008], *"This separation of the functionality of the processor-controlled machine from its user interface also facilitates adaptation of processor-controlled machines to meet 35 local requirements, for example to enable different language versions of a user interface to be provided for different language speaking countries while still providing a generic processor-controlled machine"*).

Regarding claim 2, Canon teaches that the server (processor-controlled machine) transmits a language neutral message (XML device description) across the asynchronous communications channel (remote communications interface) with information for displaying to the user and wherein the user interface manager (series of filters) includes an interpreter (filter) for the message (XML device description) (see paragraph [0010]).

Regarding claim 3, Canon teaches that the user interface manager (series of filters) includes a custom message interpreter (personalization filter) for converting the language neutral message (XML device description) into a language specific message (filtered XML device description) on a display (see paragraph [0043]).

Regarding claim 4, Canon teaches a resource file and wherein the user interface manager (series of filters) custom message interpreter (personalization filter)

accesses resources in said resource file during display of said language specific message (filtered XML device description) (see paragraph [0044]).

Regarding claim 5, Canon teaches that the applications program (user interface application) includes a print capability (see paragraph [0028]; *"Figure 6a shows a display screen 40 representing a user interface that may be displayed on the display 32 of the user interface device 12 where, as shown in Figure 5, the processor-controlled machine is the printer 5"*).

Claim 6 recites a system with substantially the same limitations as the system of claim 1, wherein the server is a print server. Canon teaches that the processor-controlled machine is a print server in one embodiment (see paragraph [0028]).

Regarding claim 7, Canon teaches a user display and wherein the message (XML device description) sent to the client (user interface device) user interface manager (series of filters) is a language neutral message (XML device description) that is interpreted (filtered) by the user interface manager (series of filters) and converted to another representation for the user display (see paragraph [0027]).

Regarding claim 8, Canon teaches that the client user interface manager (series of filters) converts a globally unique identifier from the server (processor-controlled machine) to a user understandable message on said display (see paragraph [0026]). The resource identifiers must inherently be globally unique or the system would have no way to match the correct message with the identifier.

Regarding claim 9, Canon teaches a print spooler residing on a client computer (user interface device) and wherein print spooler receives data from the applications

program (user interface application) for transmission to the print server (processor-controlled machine) and also wherein the print spooler communicates a message to the user interface manager (series of filters) upon receipt of a print request from the application program (user interface application) (see paragraph [0028]). Although the Canon reference does not explicitly mention a print spooler, a print spooler is a necessary component of all modern printer systems.

Regarding claim 10, Canon teaches that the user interface manager (series of filters) sets up an asynchronous notify channel (remote communications interface) to the print server (processor-controlled machine) for passing data related to the print request from the client print spooler to the server (processor-controlled machine) (see paragraph [0085]).

Regarding claim 11, Canon teaches that the print server (processor-controlled machine) sends a language neutral message through the asynchronous notify channel (remote communications interface) based on status of a print job being serviced by the print server (processor-controlled machine) (see paragraph [0028]).

Regarding claim 12, Canon teaches that the print server (processor-controlled machine) transmits messages into the user interface manager (series of filters) in response to a set up message from the user interface manager (see paragraph [0055]).

Regarding claim 13, Canon teaches that the user interface manager (series of filters) interprets the message (XML device description) and loads an executable component that responds to receipt of a said message (XML device description) based on the contents of said message (XML device description) (see paragraph [0006]).

Regarding claim 14, Canon teaches that the executable component accesses resources used by the executable component to display a message on a display monitor (see paragraph [0006]).

Regarding claim 15, Canon teaches a method of printing data originating from one or more clients (user interface devices) on a printer comprising providing a print spooler interface for an application (user interface application) to communicate with a client (user interface device) which in turn communicates with a print server (processor-controlled machine); said print spooler interface enabling the applications to call a service routine on the print server (processor-controlled machine) by means of a procedure call initiated by the application (user interface application); and responding to language neutral messages from the print server (processor-controlled machine) relating to a status of one or more printers communicating with the print server (processor-controlled machine) by interpreting the message and presenting a display to said message understandable by a user relating to the status of the said one or more printers (see paragraph [0028]).

Claims 16-19 recite a method with substantially the same limitations as claims 8-11, respectively. Therefore, claims 16-19 are rejected under the same rationale.

Claim 20 recites a method with substantially the same limitations as claims 13 and 14. Therefore, claim 20 is rejected under the same rationale.

Claims 21-24 recite a method with substantially the same limitations as claims 15-18, respectively. Therefore, claims 21-24 are rejected under the same rationale.

Claim 25 recites a computer readable medium with substantially the same limitations as claim 15. Therefore, claim 25 is rejected under the same rationale.

Regarding claim 26, Canon teaches that a client user interface manager executing of said client establishes a bi-directional communications channel with said server. Servers are inherently bi-directional.

Claims 27 and 28 recites a computer readable medium with substantially the same limitations as claims 22 and 23. Therefore, claims 27 and 28 are rejected under the same rationale.

Claims 29 and 30 recite a computer readable medium with substantially the same limitations as claims 19 and 20. Therefore, claims 29 and 30 are rejected under the same rationale.

Response to Arguments

Claim 10 has been amended to correct a minor informality. Therefore, all objections to the claims have been withdrawn.

Applicant asserts that the processor-controlled machine taught by Canon is the printer, and not a print server computer. The examiner respectfully disagrees.

In paragraphs [0090] through [0093], Canon describes an embodiment of the invention where "*the communications control apparatus 25 of the processor-controlled machine with which the user interface device 12 is communicating forms a server for the user interface device 12*" (paragraph [0090]), and "*The communication control*

apparatus 25, which in the embodiments described above forms a server for the user interface device 12, may be provided within the same housing as the rest of the processor-controlled machine or as a separate module or unit" (paragraph [0092]). This clearly shows that the invention taught by Canon can be implemented in a client-server networked printing environment.

Furthermore, paragraph [0009] of Canon states "*The user interface device may be used with stand-alone processor-controlled machines such as printers, copiers, scanners etc. or may be used where a number of processor-controlled machines are coupled to a network such as a local or wide area network. In this case, the user interface device may communicate with a processor controlled machine either directly or via the network*". Note here that the list of examples of processor-controlled machines given is not an exhaustive list. Also, paragraph [0012] of Canon states, "*the word network does not imply the use of any known or standard networking system or protocols and that the network may be any arrangement that enables communication between physically separate processor-controlled machines*". Given the description of processor-controlled machines given by Canon, processor-controlled machines can also include traditional print server devices, because print server devices are also machines that are controlled by processors, and are connected to a network.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571) 270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

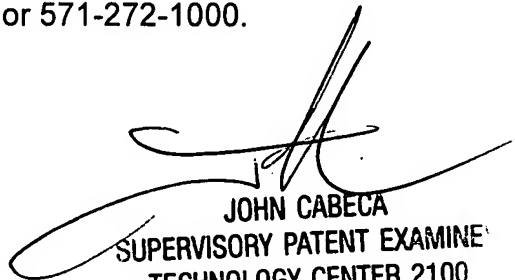
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephen Alvesteffer
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10-12-2007



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